



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,293	06/30/2000	Jean L Missinhoun	07752.0026	9926

28164 7590 06/15/2005
 ACCENTURE CHICAGO 28164
 BRINKS HOFER GILSON & LIONE
 P O BOX 10395
 CHICAGO, IL 60610

EXAMINER

BOYCE, ANDRE D

ART UNIT	PAPER NUMBER
----------	--------------

3623

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/608,293

Applicant(s)

MISSINHOUN ET AL.

Examiner

Andre Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Final office action is in response to Applicant's amendment filed April 14, 2005. Claims 1, 2, 4-7, and 21-26 are pending.
2. Applicant's arguments filed April 14, 2005 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2, 4-7, and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bushey et al (USPN 6,389,400), in view of Kannan (US 2001/0054064).

As per claim 1, Bushey et al disclose a method for interacting with a customer interaction center (i.e., service center) over a computer network (customer contacts the service center through a customer interface, including telephone, interactive voice response system, internet, or computer, figure 6 and column 9, lines 38-45), comprising the steps of: determining a channel through which the interaction will be conducted (i.e., contact via a channel, wherein the interface may be any of a variety of devices that allow communication between a customer and the service center,

column 9, lines 40-45), including identifying a telephone connection from the customer to an automated telephone system, a telephone voice connection with a human CSR, postal mail, electronic mail, a facsimile connection, a client computing device, and a thin client connection device via a wireless interface (e.g., telephone call, internet, computer network, column 6, lines 57-60); if the channel is one of a telephone connection, a telephone voice connection, a client computing device, and a thin client computing device, establishing a connection between the customer and the customer interaction center along the channel (e.g., customer's initial inquiry is via a phone call placed to the call center, column 8, lines 35-46), automatically calculating a customer value (i.e., customer score, developed from information obtained through customer task and query along with background information is quantified into a customer score, column 9, lines 4-7) for the customer based on historical customer interaction information; and determining whether said customer value exceeds a predetermined customer value threshold, (threshold match value, column 10, lines 35-37).

Bushey et al does not disclose customer score based on historical customer interaction information recorded as transaction records for previous transactions between the customer and the customer interaction center over all possible channels, including reconciling the transaction records from different channels to produce the customer value, and the customer value threshold defining the channels through which the current interaction may proceed so that lower valued customers have access only to channels requiring less interaction with a customer service

representative of the customer interaction center and channels providing a slower than real-time response to queries from the customer. Further, Bushey et al does not disclose if said customer value is less than said predetermined customer value threshold presenting said customer with a partial list of interaction options and receiving a selected option from the customer, if said customer value is not less than said predetermined customer value threshold, presenting said customer with a complete list of interaction options and receiving a selected interaction option from the customer.

Kannan discloses customer score based on historical customer interaction information recorded as transaction records for previous transactions between the customer and the customer interaction center over all possible channels (i.e., determining whether the customer qualifies for live service, by comparing the customer's profile/status with service records in database 550, ¶ 0080), including reconciling the transaction records from different channels to produce the customer value (i.e., evaluating previous transactions, based upon cookie information, ¶ 0080), and the customer value threshold defining the channels through which the current interaction may proceed (i.e., determining from the customer profile whether a customer is high-margin/low-margin provider and whether the interaction will be simple or complex, ¶ 0084) so that lower valued customers have access only to channels requiring less interaction with a customer service representative of the customer interaction center and channels providing a slower than real-time response to queries from the customer (i.e., customer selecting the type of customer service

Art Unit: 3623

wanted, including via computer (question/answer) or phone (live CSR), based upon the authorization for the type of customer service the customer can receive, ¶ 0088). Further, Kannan discloses if said customer value is less than said predetermined customer value threshold (i.e., customer having a known status, wherein service manager 610 compares the status data with service records in database 550 to determine whether the customer status is sufficient, ¶ 0080) presenting said customer with a partial list of interaction options and receiving a selected option from the customer, if said customer value is not less than said predetermined customer value threshold, presenting said customer with a complete list of interaction options (i.e., providing the level of live service to be provided, wherein a qualified customer can select a "Live CS Help" button that appears, ¶ 0091). Neither Bushey et al nor Kannan disclose if the channel is one of postal mail, electronic mail, or facsimile connection, transmitting an acknowledgement to the customer with an expected time of reply. However, the Examiner takes official notice that these various channels and transmitting an acknowledgement to the customer with an expected time of reply are all old and well known in the art.

Both Kannan and Bushey et al are concerned with effective customer service, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include transmitting an acknowledgement to the customer with an expected time of reply, historical customer interaction information recorded as transaction records for previous transactions between the customer and the customer interaction center over all possible channels, presenting said customer

Art Unit: 3623

with a partial list of interaction options and receiving a selected option from the customer, if said customer value is not less than said predetermined threshold, presenting said customer with a complete list of interaction options and receiving a selected interaction option from the customer in Bushey et al, as seen in Kannan, as an effective means of providing the corresponding interaction options to via the customer interface, thus making the system more robust.

As per claim 2, Bushey et al does not disclose conducting the interaction in accordance with the selected option. Kannan discloses the customer selecting the type of customer service wanted, including via computer (question/answer) or phone (live CSR), based upon the authorization for the type of customer service the customer can receive (§ 0088). Both Kannan and Bushey et al are concerned with effective customer service, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include conducting the interaction in accordance with the selected option in Bushey et al, as seen in Kannan, as an effective means of providing the corresponding interaction options to via the customer interface, thus making the system more robust.

As per claim 4, Bushey et al disclose retrieving a contact history that corresponds to said customer from a contact history database (historical background information S8, figure 3, column 8, lines 50-51); presenting the contact history to a CSR; and interacting with the customer in accordance with the contact history, wherein said contact history is comprised of information related to previous interactions with the

customer (based on the customer model, the customer is matched with the ideal agent, column 9, lines 20-22).

As per claim 5, Bushey et al disclose observing at least one customer response to a specific question (query customer background and satisfaction issues via customer survey, figure 3 and column 8, lines 64-67); creating a customer profile (i.e., customer model S10, column) recording said at least one customer response in a customer interaction database record (model is updated for future access S11, figure 4); repeating the observing, creating and recording steps until the completion of the interaction (i.e., completion of the survey); and copying said customer interaction database record to said contact history database (database 6, figure 6).

As per claim 6, Bushey et al disclose receiving a request from a client-computing device (customer interface 2 including computer or any other device, column 9, lines 40-45) to access a customer service interaction center. Bushey et al does not disclose determining whether said request originates from a first client computing device comprised of a first processor or from a second client computing device comprised of a second processor, wherein said first client computing device is comprised of a slower central processing unit and a lower resolution display than said second client computing device; and responding to said request in a format compatible with said first client computing device, provided said request originated from said first client computing device, otherwise; responding to said request in a format compatible with said second client computing device, if said request originated from said second client computing device. However, Bushey et al

disclose any other device able to connect to the service center and the Examiner takes Official Notice that thin client computing devices (i.e., PDA, cellular, and paging) are well known in the art and normally consist of slower processors and smaller memories than laptop or desktop clients, as seen in Applicant's specification (see page 11, lines 13-14), and would be recognized and responded to as such. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include determining and responding to the client according to processor and memory capacities in Bushey et al, thereby determining the most effective communication means via customer interface 2 (figure 6).

As per claim 7, Bushey et al disclose processing a customer request to purchase an item or service (ordering a product or service, column 6, lines 54-57); retrieving historical customer interaction data associated with said customer from a customer value database (database 6, figure 6); computing a customer value (customer model value S10, figure 4) based on said customer request and the historical customer interaction data (query of customer background S8 and task and attitude information S9, figure 4); and updating said customer value database (update customer model S11).

As per claim 21, Bushey et al disclose a customer interaction system for an enterprise, the system comprising: a plurality of customer service representative (CSR) computing devices (agent interface 8, figure 6) suitable for voice and data interaction between a CSR and a customer of the enterprise (customer contacts the service center through a customer interface, including telephone, interactive voice

Art Unit: 3623

response system, internet, or computer, figure 6 and column 9, lines 38-45); a customer interaction module in communication with each CSR computing device, the customer interaction module comprising: an interaction database system storing data about customer profiles and preferences, customer contact history data, and data about a current interaction with a customer (i.e., historical database 6, column 9, lines 50-59); a transaction/information processing system under control of a control program for communicating data between the CSR and the customer, the control program configured to control the customer interaction system (match and routing processor, 14 and 16, respectively, figure 6), and automatically calculating a customer value for the customer based on the data about a profile and preferences of the customer, the customer contact history data and data about a current interaction with the customer retrieved from the interaction database system (i.e., customer score, developed from information obtained through customer task and query along with background information is quantified into a customer score, column 9, lines 4-7).

Bushey et al does not disclose if the customer value is less than a predetermined threshold, presenting the customer with a partial list of options for interaction with the CSR, and receiving a selected option from the customer, and if the selected interaction option comprises a client computing device connection from the customer to the customer interaction center through a public network, displaying to the CSR information from the interaction database system about the profile and preferences of the customer, information from the interaction database system about previous

interactions the customer has had with other CSRs, an image of a Web page currently being accessed by the customer, and suggested scripts for delivery by the CSR.

Kannan discloses if the customer value is less than a predetermined threshold, presenting the customer with a partial list of options for interaction with the CSR, and receiving a selected option from the customer (i.e., determining whether the customer qualifies for live service, by determining the customer's profile/status based upon previous transactions, including evaluating previous transactions, based upon cookie information, ¶ 0080), and if the selected interaction option comprises a client computing device connection from the customer to the customer interaction center through a public network (i.e., customer service over the internet, ¶ 0068), displaying to the CSR information from the interaction database system about the profile and preferences of the customer (i.e., CSR is presented with information related to the customer and customer query, ¶ 0113), information from the interaction database system about previous interactions the customer has had with other CSRs (i.e., past queries by the same customer, URL history, and service history, ¶ 0113), an image of a Web page currently being accessed by the customer (i.e., customer URL, ¶ 0113), and suggested scripts for delivery by the CSR (i.e., CSR can select information to provide the customer from prestored scripts, ¶ 0115).

Both Kannan and Bushey et al are concerned with effective customer service, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include presenting said customer with a partial list of

interaction options and receiving a selected option from the customer, if said customer value is not less than said predetermined threshold, presenting said customer with a complete list of interaction options and displaying to the CSR information from the interaction database system in Bushey, as seen in Kannan, as an effective means of providing the corresponding interaction options to via the customer interface, thus making the system more robust.

As per claims 22-23, Bushey et al does not explicitly disclose the control program is further configured to control the customer interaction system for pre-configuring information for display to the customer on a client computing device of the customer based on the data about the customer's profiles and preferences, the customer's contact history data, and data about the current interaction with the customer from the interaction database system, and the control program is further configured to control the customer interaction system for pre-configuring the information for display based on a received request for product or service information from the customer. Kannan discloses authorization for the type of customer service and menu available to the customer, based upon the customer profile and service desired (§ 0088). Both Kannan and Bushey are concerned with effective customer service, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include pre-configuring information for display to the customer on a client computing device of the customer based on the data about the customer's profiles and preferences, the customer's contact history data, and data about the current interaction, and pre-configuring the information for display

based on a received request for product or service information in Bushey, as seen in Kannan, as an effective means of providing the corresponding interaction options to via the customer interface, thus making the system more robust.

As per claim 24, Bushey et al disclose the control program is further configured to control the customer interaction system for providing information about related products and services based on the data about the customer's profiles and preferences, the customer's contact history data, and data about the current interaction with the customer from the interaction database system (e.g., customer is assessed based upon background information and queries, in order to determine the customer's willingness to be sold additional products and services, column 8, lines 56-62).

As per claim 25, Bushey et al disclose the control program is further configured to control the customer interaction system for storing in the interaction database system information about the request received from the customer and information about the pre-configured information provided to the customer (e.g., customer model is used to update the customer's background information, column 9, lines 12-14).

As per claim 26, Bushey et al disclose an automated telephone system responsive to keypad data and voice information originating with a customer through telephone interaction with the customer interaction system (column 9, lines 39-43). Bushey et al does not explicitly disclose a mail processing system to process written postal and electronic mail and facsimile interactions from a customer through written correspondence with the customer interaction system. However, processing written

postal and electronic mail and facsimile interactions from a customer is old and well known, and it would have been obvious to one having ordinary skill in the art at the time the invention was made to include processing written postal and electronic mail and facsimile interactions from a customer in Bushey, as an efficient means of receiving additional customer correspondence, thereby increasing the flexibility of the system.

Response to Arguments

5. In the Remarks, Applicant argues that neither Kannan nor Bushey et al disclose or suggest automatically calculating a customer value for the customer based on historical customer interaction information recorded as transaction records for previous transactions between the customer and the customer interaction center over all possible channels. The Examiner respectfully disagrees. As seen in the above rejection, Bushey et al and Kannan indeed teach all of the elements of the claims, wherein the Examiner has clarified the specific portions of the claim language, in independent claims 1 and 21, which Kannan teaches. Specifically, Bushey et al disclose a customer score developed from information obtained through customer task and query along with background information is quantified into a customer score (column 9, lines 4-7). In addition, contrary to Applicant's assertions, Kannan discloses determining whether the customer qualifies for live service, by comparing the customer's profile/status with service records in *database*

550 (§ 0080), thus calculating a customer value (i.e., status level) based on historical records.

Applicant also argues that neither Kannan nor Bushey et al disclose the customer value threshold defining the channels through which the current interaction may proceed, and if the customer value is less than a predetermined customer value threshold, presenting the customer with a partial list of interaction options. The Examiner respectfully disagrees and submits that Kannan discloses the customer having a known status, wherein service manager 610 compares the status data with service records in database 550 to determine whether the customer status is sufficient (§ 0080) and the customer selecting the type of customer service wanted, including via computer (question/answer) or phone (live CSR), based upon the authorization for the type of customer service the customer can receive (i.e., selecting the channel, § 0088).

Lastly, with respect to claim 21, the Examiner submits that all of Applicant's claim limitations are indeed addressed, as seen in the above rejection. Specifically, Kannan discloses if the customer value is less than a predetermined threshold, presenting the customer with a partial list of options for interaction with the CSR, and receiving a selected option from the customer (i.e., determining whether the customer qualifies for live service, by determining the customer's profile/status based upon previous transactions, including evaluating previous transactions, based upon cookie information, § 0080), and if the selected interaction option comprises a client computing device connection from the customer to the customer interaction

Art Unit: 3623

center through a public network (i.e., customer service over the internet, ¶ 0068), displaying to the CSR information from the interaction database system about the profile and preferences of the customer (i.e., CSR is presented with information related to the customer and customer query, ¶ 0113), information from the interaction database system about previous interactions the customer has had with other CSRs (i.e., past queries by the same customer, URL history, and service history, ¶ 0113), an image of a Web page currently being accessed by the customer (i.e., customer URL, ¶ 0113), and suggested scripts for delivery by the CSR (i.e., CSR can select information to provide the customer from prestored scripts, ¶ 0115).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3623

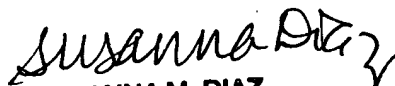
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571) 272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



adb
June 6, 2005



SUSANNA M. DIAZ
PRIMARY EXAMINER

AU 3623